

We claim:

1. A valve assembly for downhole use, comprising:
a valve body having a passage therethrough;
a valve member selectively operable between an open and a closed position based on the composition of the fluid contacting it.
2. The valve assembly of claim 1, wherein:
said valve member obtains said closed position by increasing in volume.
3. The valve assembly of claim 2, wherein:
said valve member hardens when exposed to fluid that urges it to said closed position.
4. The valve assembly of claim 1, wherein:
said passage comprises an annular passage around a mandrel in said valve body;
said valve member comprises a sleeve in said passage;
said sleeve selectively changing in volume to obstruct said annular passage.
5. The valve assembly of claim 4, wherein:
said valve body having an inlet to direct flow around said mandrel and through said annular passage for contact with said sleeve and an outlet to direct flow from said annular passage into said mandrel to an end connection thereon.
6. The valve assembly of claim 5, further comprising:
a screen having an inner passage and connected to said end connection such that when said valve member is in said open position flow in the well can pass through said screen inner passage and when said valve member is in said closed position flow in the

well must pass through the screen because said inner passage is closed off by said valve member.

7. The valve assembly of claim 1, wherein:
said valve member is responsive to hydrocarbons to move to said closed position.
8. The valve assembly of claim 1, wherein:
said valve member is not responsive, to move to said closed position, to fluids that don't contain hydrocarbons.
9. The valve assembly of claim 1, wherein:
said valve member is responsive to water to move to said closed position.
10. The valve assembly of claim 1, wherein:
said valve member comprises an elastomer.
11. The valve assembly of claim 1, wherein:
said valve member comprises rubber.
12. The valve assembly of claim 1, wherein:
said valve member comprises a clay that swells upon contact with water.
13. The valve assembly of claim 1, further comprising:
a cover for said valve member that is selectively removable downhole.
14. The valve assembly of claim 13, wherein:
said cover is removed by one of mechanical force, chemical reaction, and fluid force.
15. A method of well completion and production, comprising:
flowing fluid in the wellbore;
taking flow to the surface through a passage in the interior of a valve assembly;

closing off said passage in said valve assembly by virtue of the composition of said production;

redirecting said flow due to said closing off.

16. The method of claim 15, comprising:

connecting a screen to said valve assembly;

allowing flow that passes through said valve assembly to flow through an interior passage in said screen;

redirecting said flow to go through said screen as a result of closure of access to said interior passage of said screen by virtue of said closing of said passage in said valve assembly.

17. The method of claim 16, comprising:

providing a valve member in said valve assembly that closes it responsive to the presence of hydrocarbons.

18. The method of claim 16, comprising:

providing a valve member in said valve assembly that closes it responsive to the presence of water.

19. The method of claim 17, comprising:

providing a valve member that swells to close a flow passage in said valve assembly.

20. The method of claim 15, comprising:

using a valve member in said valve assembly made of one of rubber, elastomer, clay, EPDM and Halobutyl.